Please cancel claim 106.

107. (Amended) The system as recited in claim 113 **[106]**, further comprising a second articulate arm which has a second end effector, and a second input device which creates a second input command in response to an instruction from the surgeon, said computer **[controller]** receives said second input command from said second input device and provides a second output command to said second articulate arm to move said second end effector about a second pivot point located at a second incision of the patient.

Please cancel claim 108-110.

111. (Amended) The system as recited in claim 113 **[106]**, wherein said first end effector has a force sensor and said first input device has an actuator that is coupled to said force sensor to apply a force to the surgeon that corresponds to a force sensed by said force sensor.

112. The system as recited in claim 111, wherein the force applied to the surgeon is a scaled increment of the force sensed by said force sensor.

113. (Amended) A medical robotic system that can be inserted through a first incision of a patient and controlled by a surgeon **[for use with a patient]** comprising:

a first articulate arm with a first end effector, wherein the end effector pivots about a first pivot point disposed at the first incision;

a first input device that creates a first input command in response to an instruction from the surgeon; and,

a computer that is coupled to said first input device and said first articulate arm, said computer receives said first input command from said first input device and provides a first output command to said first articulate arm to move said first end effector relative to the first pivot point.

Please cancel claim 114.

115. A method for allowing a user to remotely control a movement of a surgical instrument having a tip, the method comprising the steps:

a) establishing an original position of the surgical instrument tip;

b) inputting a command provided by a user to move the surgical instrument in a desired direction relative to an object displayed on a display device;

c) computing an incremental movement of the surgical instrument based on the command provided by the user and on the original position of the surgical instrument;

d) moving the surgical instrument in the desired direction so that the surgical instrument tip always moves in a direction commanded by the user.

116. A method for allowing an operator to control a movement of a surgical instrument having an end effector at a remote worksite, the method comprising:

a) inputting a command provided by the operator to move the surgical instrument in a desired direction relative to an object displayed on a display device;

b) computing a movement of the surgical instrument based on the command provided by the operator; and

c) moving the surgical instrument in the desired direction so that the end effector always moves in the direction commanded by the operator.

Please cancel claim 117.

118. A medical robotic system, comprising:

a robotic arm;

a coupler that pivotally attaches to the arm;

an endoscopic surgical instrument that is held by said coupler; and

a controller having a handle, the controller in electrical communication with the robotic arm; and

wherein movement at the controller produces a proportional movement of the robotic arm and surgical instrument.

119. (Amended) **[The system of claim 118]** A medical robotic system, comprising:

a robotic arm;

a coupler that pivotally attaches to the arm;

an endoscopic surgical instrument that is held by said coupler; and a controller having a handle, the controller in electrical communication with the robotic arm; and

wherein movement at the controller produces a proportional movement of the robotic arm and surgical instrument, and wherein said endoscopic surgical instrument is an articulable endoscopic surgical instrument.

120. (Amended) **[The system of claim 118]** A medical robotic system, comprising:

a robotic arm;

a coupler that pivotally attaches to the arm;

an articulable endoscopic surgical instrument that is held by said coupler; and

a controller having a handle, the controller in electrical communication with the robotic arm; and

wherein movement at the controller produces a proportional movement of the robotic arm and the articulable surgical instrument, and wherein the articulable surgical instrument comprises a base, a pivot linkage, and a distal end.

121. (Amended) The system of claim 120 wherein a movement at the controller results in corresponding movement of the distal end of the articulable surgical instrument relative **[releative]** to the base of the articulable surgical instrument.

122. (Amended) The system of claim 121 wherein a cauterizer is **[the tool]** attached at the distal end of the articulable surgical instrument **[is a cauterizer]**.

123. (Amended) A method for operating a surgical robotic system for performing a surgical procedure on a patient, the method comprising:

1) providing a first articulate arm, a controller and an input device which receives input commands, the first articulate arm in electrical communication with the controller and the controller in electrical communication with the input device;

2) cutting at least one incision into the patient;

3) attaching a surgical instrument to the first articulate arm;

4) inserting said surgical instrument into the patient through the at least one incision;

5) generating input commands to move said surgical instrument in accordance with the procedure being performed wherein said first articulate **[robotic]** arm moves said surgical instrument in accordance with the input commands; and

6) removing the surgical instrument from the patient.

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124. The method of claim 123 wherein said surgical instrument is a grasper.

125. The method of claim 123 wherein the surgical instrument is a cauterizer.

126. The method of claim 123 wherein the surgical instrument is a cutting blade.

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127. A medical robotic system, comprising:

a manipulator arm;

an endoscopic surgical instrument movably held by the arm;

an input device having a handle, the input device in electrical communication with the arm; and

wherein movement at the input device produces a proportional movement of the arm and surgical instrument.

Please cancel claim 128.

(Amended)

129. **[The system of claim 128,]** A medical robotic system, comprising:

a manipulator arm;

an endoscopic surgical instrument movably held by the arm, wherein said surgical instrument is an articulable endoscopic surgical instrument;

an input device having a handle, the input device in electrical communication with the arm; and

wherein movement at the input device produces a proportional movement of the arm and surgical instrument, and wherein the articulable surgical instrument comprises a forearm, a wrist, and an end effector.

130. The system of claim 129, wherein a movement at the input device results in corresponding movement of the end effector relative to the forearm of the articulable surgical instrument.

131. (Amended) The system of claim 130, wherein the articulable **[articulatable]** surgical instrument comprises an electrosurgical coagulator.

132. A method for operating a surgical robotic system for performing a surgical procedure on a patient, the method comprising:

1) providing a first articulate arm, a computer and an input device which receives input commands, the first arm in communication with the computer and the computer in communication with the input device;

2) forming at least one incision into the patient;

3) attaching a surgical instrument to the first arm;

4) inserting said surgical instrument into the patient through the at least one incision; and

5) generating input commands to move said surgical instrument in accordance with the input commands.

Please cancel claims 133-137.

138. A system that allows a user to control a movement of a surgical instrument, wherein the surgical instrument is coupled to a display device that displays an object, comprising:

a mechanism that moves the surgical instrument, said mechanism having an original position;

an input device that receives a command to move the surgical instrument in a desired direction relative to the object displayed by the display device; and,

a controller that receives said command to move the surgical instrument in the desired direction, computes a movement of said mechanism based on said command and the original position of said mechanism so that the surgical instrument moves in the desired direction, and provides output signals to said mechanism to move said mechanism said computed movement to move the surgical instrument in the desired direction commanded by the user.

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139. (Amended) The system as recited in claim 138, wherein said mechanism includes a first linkage arm coupled to the surgical instrument and a first actuator which can rotate said first linkage arm and the surgical instrument in a plane perpendicular to a first **[z]** axis, said first actuator being coupled to a linear **[liner]** actuator which can translate said first linkage arm **[actuator]** along an axis parallel with the first **[z]** axis.

Please cancel claim 140.

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141. (Amended) The system as recited in claim 138, wherein said controller **[control means]** is a computer which receives input signals from said input device **[means]** and provides output signals to said controller **[control means]** to move the position of the surgical instrument.

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142. A system that allows a user to control a movement of a surgical instrument, wherein the surgical instrument is coupled to a display that displays an object, comprising:

a mechanism that moves the surgical instrument;

an input device that receives a command to move the surgical instrument in a desired direction relative to the object displayed by the display device; and,

a computer that receives said command to move the surgical instrument in the desired direction, computes a movement of said mechanism based on said command so that the surgical instrument moves in the desired direction, and provides output signals to said

mechanism to move said mechanism said computed movement to move the surgical instrument in the desired direction commanded by the user.

143. (Amended) The system of claim 142, wherein the instrument has an elongate shaft, a wrist, and an end effector, the shaft having a proximal end adjacent the mechanism, the wrist pivotably coupling a distal end of the shaft to the end effector, wherein the mechanism **[mechism]** moves the end effector relative to the object by pivoting the instrument about a pivot point disposed along the shaft and by articulating the wrist.

144. A system for allowing a surgeon to control a surgical instrument that is inserted through an incision of a patient, wherein the incision defines a pivot point, comprising:

an articulate arm having an end effector for holding the surgical instrument, an active joint for moving said end effector, and an actuator for spinning the surgical instrument;

a first input device for receiving an input command from the surgeon; and

a controller for receiving said input command, for computing a movement of said articulate arm based on said input command, for providing an output command to actuate said active joint and said actuator, and for moving the surgical instrument about the pivot point.

145. A system for allowing a surgeon to control a surgical instrument that is inserted through an incision of a patient, wherein a pivot point is disposed at the incision, comprising:

a manipulator arm holding the surgical instrument, the arm having a driven joint and an actuator for spinning the surgical instrument;

a first input device for receiving an input command from the surgeon; and

a computer for receiving said input command, for computing a movement of said arm based on said input command, for providing an output command to actuate said driven joint and said actuator, and for moving the surgical instrument about the pivot point.

Please cancel claim 146.

Please add claims 147-151 as follows:

--147. (New) The system of claim 113, wherein the first articulate arm comprises an active joint for moving the end effector and an actuator for spinning the surgical instrument, the computer computing a movement of said first articulate arm based on said first input command and generating the output command to actuate said active joint and said actuator and move the surgical instrument about the pivot point.

148. (New) The method of claim 116, wherein a pivot point is located at the incision and wherein an end effector of an articulate arm holds the surgical instrument, the articulate arm having a driven joint and an actuator, and further comprising generating the output command based on the computed movement and moving the surgical instrument about the pivot point in response to the output command by actuating the driven joint of the articulate arm, and by spinning the surgical instrument with the actuator of the articulate arm.

149. (New) The system of claim 127, the system for allowing a surgeon to control the surgical instrument when the surgical instrument is inserted through an incision of a patient, wherein the manipulator arm comprises an active joint for moving the end effector and an actuator for spinning the surgical instrument, wherein the input device receives an input command from the surgeon, and further comprising a controller for receiving the input command, for computing a movement of the manipulator arm based on said input command, for providing an output command to actuate said active joint to move the surgical instrument about the pivot point and to actuate said actuator to spin the instrument.

150. (New) The method of claim 132, wherein a pivot point is located at the incision, and further comprising generating a computed movement of the articulate arm with the computer in response to the input commands, and moving the surgical instrument about the pivot point in response to the input commands by actuating a driven joint of the articulate arm, and by spinning the surgical instrument with an actuator of the articulate arm.

151. (New) The system of claim 142, the surgical instrument inserted through an incision of a patient, wherein a pivot point is located at the incision, and wherein the mechanism comprises an articulate arm coupled to the surgical instrument, the first